

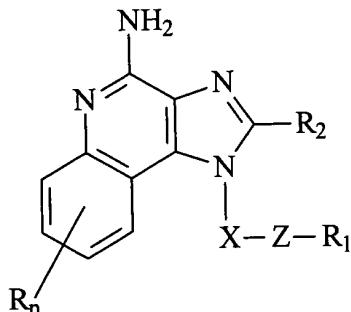
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-21 (canceled)

22 (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of claim 1 to the animal the formula (I):



(I)

wherein: X is -CHR₃-; -CHR₃-alkyl-; or -CHR₃-alkenyl-;

Z is -S-, -SO-, or -SO₂-;

R₁ is selected from the group consisting of:

-alkyl;

-aryl;

-heteroaryl;

-heterocyclyl;

-alkenyl;

-R₄-aryl;

-R₄-heteroaryl;

-R₄-heterocyclyl;

R₂ is selected from the group consisting of:

-hydrogen;

-alkyl;
-alkenyl;
-aryl;
-heteroaryl;
-heterocyclyl;
-alkyl-Y-alkyl;
- alkyl-Y- alkenyl;
-alkyl-Y-aryl; and
- alkyl or alkenyl substituted by one or more substituents selected from the group consisting of:
-OH;
-halogen;
-N(R₃)₂;
-CO-N(R₃)₂;
-CO-C₁₋₁₀ alkyl;
-CO-O-C₁₋₁₀ alkyl;
-N₃;
-aryl;
-heteroaryl;
-heterocyclyl;
-CO-aryl; and
-CO-heteroaryl;
each R₃ is independently H or C₁₋₁₀ alkyl;
R₄ is alkyl or alkenyl;
Y is -O- or -S(O)₀₋₂;
n is 0 to 4; and
each R present is independently selected from the group consisting of C₁₋₁₀ alkyl,
C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;
or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

26 (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of claim 12 to the animal selected from the group consisting of:

2-butyl-1-[4-(phenylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[2-(phenylthio)ethyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[4-(phenylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

1-[2-(phenylthio)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine;

1-[4-(phenylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

1-[4-(phenylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

1-[4-(methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-methyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-ethyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-hexyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-(2-methoxyethyl)-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[5-(methylthio)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

2-butyl-1-[5-(methylsulfinyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine;

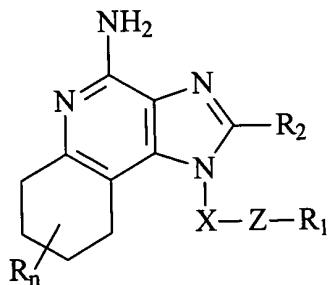
2-butyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine; and

2-butyl-1-[3-(phenylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine;

or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

27-30 (canceled)

31 (currently amended) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of claim 13 to the animal the formula (II):



(II)

wherein: X is -CHR₃-, -CHR₃-alkyl-, or -CHR₃-alkenyl-;

Z is -S-, -SO-, or -SO₂-;

R₁ is selected from the group consisting of:

-alkyl;

-aryl;

-heteroaryl;

-heterocyclyl;

-alkenyl;

-R₄-aryl;

-R₄-heteroaryl; and

-R₄-heterocyclyl;

R₂ is selected from the group consisting of:

-hydrogen;

-alkyl;

-alkenyl;

-aryl;

-heteroaryl;

-heterocyclyl;

-alkyl-Y-alkyl;

- alkyl-Y- alkenyl;

-alkyl-Y-aryl; and

- alkyl or alkenyl substituted by one or more substituents selected from the

group consisting of:

-OH;

-halogen;

-N(R₃)₂;

-CO-N(R₃)₂;

-CO-C₁₋₁₀ alkyl;

-CO-O-C₁₋₁₀ alkyl;

-N₃;

-aryl;

-heteroaryl;

-heterocyclyl;

-CO-aryl; and

-CO-heteroaryl;

each R₃ is independently H or C₁₋₁₀ alkyl;

R₄ is alkyl or alkenyl;

Y is -O- or -S(O)₀₋₂₋;

n is 0 to 4; and

each R present is independently selected from the group consisting of C₁₋₁₀ alkyl,

C₁₋₁₀ alkoxy, hydroxy, halogen and trifluoromethyl;

or a pharmaceutically acceptable salt thereof, that induces cytokine biosynthesis.

32 (new) The compound 2-butyl-1-[5-(methylsulfonyl)pentyl]-1*H*-imidazo[4,5-*c*]quinolin-4-amine or a pharmaceutically acceptable salt thereof.

33 (new) A method of inducing cytokine biosynthesis in an animal comprising administering a compound of claim 32 to the animal in an amount effective for cytokine induction.

34 (new) A method of treating a viral disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of claim 32 that induces cytokine biosynthesis.

35 (new) A method of treating a neoplastic disease in an animal in need thereof comprising administering to the animal a therapeutically effective amount of a compound of claim 32 that induces cytokine biosynthesis.